## Paris-NY1 (V2.5)

Flight created on 28.08.2022 (21.10.2023 V2.5 English)

Estimated flight duration $4 h$
(With flight acceleration over the ocean about 1,5h)
Difficulty level hard
Mission: Fly with Concorde from Paris to New York. (Charles de Gaulle - Kennedy INTL)

Prerequisite: For this flight, the Concorde is absolutely
necessary.
Download this plane here:
https://www.rikoooo.com/downloads/viewdownload/51/967
If the download link does not work, contact me: p3d@andi20.ch

## Introduction

Boss: Today you're flying from Paris to New York on a Concorde.
Me: Are you kidding me? The Concordes were taken out of service years ago. You know, the one accident on takeoff, after that the planes went downhill and they were decommissioned.

Boss: Decommissioned, but not scrapped. I bought one of those planes. After all, it's the safest airliner in the world. No crashes, in all that time.

Me: And what about the crash in July 2000, shortly after takeoff?
Boss: It doesn't count, because the accident only happened because another plane lost a piece of metal on the runway, which shredded a tire on Concorde and caused the crash. Without such airplanes, which lose dangerous parts, the Concorde would be accident-free until today!

Me: You're probably right, but the Concorde is really a gas guzzler and not really environmentally friendly. Why should one therefore fly with it?

Boss: Because it gets you to New York twice as fast as conventional subsonic aircraft.
A pop star has messed up his schedule, only the Concorde can save him:
At 11h30 his autograph session ends in Paris, but at 10h30 his concert starts in New York.

Me: That's an hour earlier, the Concorde can't turn back time.

Boss: You forget the time zones:
09h30 UTC = 11h30 local time Paris
14h30 UTC = 10h30 local time New York
So 11h30 in Paris is 5h before $10 h 30$ in New York.
The Concorde can turn back the time, because it flies faster than
the earth rotation.

## The flight

This is an IFR flight (IFR = Instrument Flight Rules), where you have to take over the complete radio with the air traffic control and will perform an ILS landing approach.

If you are not familiar with ILS, IFR and communication with air traffic control, I recommend to fly the flights "IFR Kronoberg" and "IFR Kronoberg Teil2" before.
You can download these flights here: https://andi20.ch/p3d/

## Start

You are at the airport "Charles de Gaulle" in the parking area.

Activate GPS and cabin view.
(Menu Vehicle/InstrumentPanel)


Cabin is unimportant, but finely shows the current altitude and speed.
To place Cabin as shown below do the following:

1) Open Cabin in Vehicle/InstrumentPanel menu (appears in full screen mode).
2) Right click and select "Undock Window".
3) Reduce window and dock with right click "Dock Window/Virtual Cockpit - View 00".
4) Move Cabin to a suitable place and resize it.

If you fly in full screen mode:
Temporarily deactivate this mode to adjust everything (alt+ENTER). Reactivate by "Views/Full Screen", or "alt+ENTER".


Alternatively, temporarily enable the "Menu Bar" (right-click with the mouse and disable "Hide Menu Bar").

| $\checkmark$ Cockpit |
| :--- |
| Outside |
| Tower |
| Runway |
| Air Traffic |
| Sensor |
| View Groups |
| Manage Cameras |
| Reset Camera |
| $\square$ Panel Only |
| Window Definitions |
| $\square$ Window Titles |
| Axis Indicator |
| Iop-down Orientation |
| $\square$ |
| $\square$ |

For me it looks like this:


You can place the windows as you like.

Details about the GPS: Activate MAP.


Switch the 5 marked buttons to green and set a suitable distance.


I recommend a distance of $20-40 \mathrm{~nm}$.

Follow the instructions of the co-pilot and air traffic control.

You will need to make some adjustments to the autopilot, so you will find explanations below.

## The flight

You take off and climb to 55000 feet as instructed by air traffic control. After reaching 55000 feet you accelerate to Mach 2.02.

It is interesting to observe how the difference between indicated speed (see IAS display) and the real "ground speed" (see GPS map) increases with increasing altitude. With increasing airspeed also
the flight duration shortens massively.

20000 feet, Mach 0.61


55000 feet, Mach 1.00


55000 feet, Mach 2.02


Since this is a long flight, you can speed up the flight by a factor of $4 x$ or $8 x$. More than $8 x$ Speed is not recommended because air traffic control wants some frequency changes.
(Menu Options/Simulation Rate)


If you have very fast fingers, you can also accelerate to 16x. The co-pilot will tell you early enough when to go to "normal speed".

About 1900 nm before the destination the engines 1 and 2 will fail for unknown reason, the co-pilot will warn you 50 nm before. As soon as the engines are running again, you can accelerate the flight again.

If anyone knows why the engines fail, or how to avoid it, please contact me. P3d@andi20.ch

350 nm before the destination you have to deactivate the flight acceleration again, because the descent will be initiated soon. The co-pilot lets you know.

About 86 miles from New York you will be directed into the ILS approach.
Air Traffic Control will assign you a runway (unfortunately not always the same one).

Search for the airport in the Navigation/Flight Planner menu and find the appropriate approach data.

| Vehicle | Navigation World Options |
| ---: | ---: |
|  | Go to Airport... |
|  | $\square$ Map... |
| Flight Planner... |  |
| Navigation Log... |  |
|  | $\square$ Visual Flight Path... |
|  | $\square$ Navigation Visuals... |
|  | Air Traffic Control |
|  |  |

Or just use the matching list:
P3dV4 und P3dV5:

| Runway | Length | Surface ILS ID | ILS Freq ILS Hdg |  |
| :--- | :--- | :--- | :--- | :--- |
| 13R | 14502 | Concrete |  |  |
| 31L | 14502 | Concrete IMOH | 111.350 | 315 |
| 4L | 12081 | Concrete IHIQ | 110.900 | 045 |
| 22R | 12081 | Concrete IJOC | 109.500 | 222 |
| 13L | 9993 | Asphalt ITLK | 111.500 | 135 |
| 31R | 9993 | Asphalt IRTH | 111.500 | 315 |
| 4R | 8401 | Asphalt IJFK | 109.500 | 045 |
| 22L | 8401 | Asphalt IIWY | 110.900 | 225 |

P3dV6:

| Runway | Length | Surface ILS ID | ILS Freq ILS Hdg |  |
| :--- | :--- | :--- | :--- | :--- |
| 13R | 14502 | Concrete |  |  |
| 31L | 14502 | Concrete IMOH | 111.350 | 314 |
| 4L | 12081 | Concrete IHIQ | 110.900 | 044 |
| 22R | 12081 | Concrete IJOC | 109.500 | 221 |
| 13L | 9993 | Concrete ITLK | 111.500 | 134 |
| 31R | 9993 | Concrete IRTH | 111.500 | 314 |
| 4R | 8401 | Asphalt IJFK | 109.500 | 044 |
| 22L | 8401 | Asphalt IIWY | 110.900 | 224 |

When descending below 5000 feet, you may hear a penetrating warning signal (bip-bip-bip...).
The warning comes because you are descending at 2000 feet/min and the ground is rapidly approaching.
Ignore the "bip" because it will stop as soon as you reach the altitude required by ATC.
Alternatively, you can reduce the descent rate to 1500.

After landing, leave the runway and request a taxi to the refueling station.

## Concorde help

## Overview:



Detail airplane nose:


The nose of the plane is lowered with this lever. A combination of right and left click with the mouse ( $r$,r,l,l,r,r,l for complete lowering).

Alternatively, you can lower/lift the nose of the plane with "flap lever" and/or its keyboard command.
(Because the Concorde has no landing flap, this keyboard command was used for the aircraft nose).

This change does not come from me, it was done by the "builder" of the virtual Concorde.

Detail engine displays:


On the way, engines $1+2$ will fail for unknown reasons. So watch these displays.

Main displays:


Climb rate detail:


The Concorde climbs normally with $5000 f t / m i n$. Below 10000 feet, however, only $2000 \mathrm{ft} / \mathrm{min}$.
The sink rate is always $2000 f t / m i n$.
Detail HSI:
The number in the upper left corner shows the distance to the target.
The number in the upper right corner shows the speed over ground.


The Heading Situation Indicator shows you in NAV mode if you are on course.
Actually, the autopilot does everything on its own until the landing approach.
From then on, you must watch when the laterally offset yellow line
in the center of the instrument moves toward the center. Only then do you activate "LAND".
The co-pilot will help you a little bit.

Detail autopilot:


All the switches you need are listed here.
The co-pilot will tell you when to operate switches and make adjustments.

For the following switches an explanation:

1) INS (Intertial Navigation Mode):

P3d does not support this alternative navigation system, so this switch has been changed to activate the GPS (which is normally not available in the Concorde).
Diese Änderung kommt nicht von mir, das hat der "Erbauer" der virtuellen Concorde so gemacht.
2) "VOR LOC" + "LAND": These two switches are designed as a single switch (labeled "APR") on most aircraft. On an ILS approach, this is used to pick up the landing course transmitter. Normally, you can activate this switch long before the landing course transmitter is in range.
In Concorde's experience, this only works when the landing course transmitter has been correctly detected.
Usually only when the air traffic control guides you into the final approach.
(You are 21 miles south. Turn right heading 015, Descend and maintain 1500 Cleared runway 4R approach. Maintain 1500 until established on the localizer.)

- VOR LOC" should be activated only then, otherwise the Concorde may take up the opposite course or fly uncontrolled in a circle. - LAND" is activated as soon as the Concorde has picked up the transmitter and is aligned with it (yellow line in the heading indicator approaches the center).
"LAND" then causes the descent along the glide path to commence. If you do not activate "LAND", "VOR LOC" will guide you exactly
towards the runway, but you will not descend.

3) VERT SPEED: This switch sets a climb/descent rate of $2000 \mathrm{ft} / \mathrm{min}$.
4) MAX CLIMB: This switch sets a climb rate of $5000 \mathrm{ft} / \mathrm{min}$. This is the usual climb rate of the Concorde.

Final notes:

1) The Concorde is great implemented, nevertheless I miss an important display and function:

- You can't adjust the elevator trim anywhere (except by keyboard command).
- You can't see what the current position of this trim is (except in the 2D-Cokpit, when you switch to engine displays).
There you can see this setting (small).


For me not really bad, because thanks to "Logitech-Multipanel" I have the trim wheel and on a "Logitech-FIP" I see the trim setting.

On this flight $I$ have preset a trim of +5 , thus the Concorde starts practically by itself when reaching 210 IAS.

So don't be surprised if in a flight you created yourself, the Concorde doesn't take off on its own without a massive pull on the stick!
2) The Concorde has no flaps. The nose of the plane can be operated with the "normal" flap switch, or the corresponding keyboard commands.

So far no problem, but I noticed that lowering the nose has a massive braking effect, similar to activated flaps. Is this also the case in reality?

Therefore, don't be surprised if I want to lower the nose of the plane by 1 step when descending already a little below Mach 1, and at below 250 accounts already to step 3, although the runway is still eternally far away. Lowering the nose helps to slow down and descend.

I hope you enjoyed this flight, if so please give feedback to p3d@andi20.ch . Also send error messages (spelling mistakes, wrong information, etc.) to p3d@andi20.ch, I appreciate any feedback.

